

ETV Pilot for Indoor Air Products

Meeting Summary for the Task Force on Ventilation Air Filters Arlington, VA, February 17, 1998

Background

The third meeting of the Task Force on Ventilation Air Filters was held at the Marriott Key Bridge, Arlington, VA on February 17, 1998.

Action Items

RTI and EPA

1. RTI will distribute the meeting minutes and post a summary on the Web site.
2. RTI plans to investigate two alternate means of conditioning the filters. The objective is to find a loading dust that more closely shows the trends we have seen with ambient exposure (specifically, the decrease in efficiency observed with charged-media filters) than we see using the ASHRAE 52.2 procedure (loading to 0.04" H₂O pressure drop increase with ASHRAE dust).
3. RTI will define the full protocol: product procurement, product definition, QA, verification statement and report, how the verification statement can be used and for how long, cost.
4. Based on industry input, RTI and EPA will define the product limits for a single test.
5. RTI and EPA will make a decision about reporting dust loading.
6. RTI will host a meeting for laboratories (and others) interested in the testing procedure and equipment. Public announcement for this meeting will be distributed. Tentative date is May 18-19, 1998 at RTI.
7. RTI will announce the testing program once details are finalized.
8. The next stakeholder meeting is scheduled for September 29, 1998 at RTI.

Industry and others

1. Industry will further the product definition in the report presented at the meeting. This would include providing input on what the limits for a single test should be, based on size, etc.
2. Provide RTI with suggestions for where announcements on the testing and on the lab proficiency programs should be placed.

Update on EPA and Industry Programs

Dave Ensor provided an update on RTI's ETV programs. RTI has two pilots – indoor air quality and air pollution control technology. Under the indoor air quality program, RTI is currently working with two industries: general ventilation air filters and commercial furniture.

Al Veeck, President of NAFA presented an update on their product certification program. They have established three task groups – financial, administration and testing. They expect to begin certification in May 1999. His presentation covered the action items they were assigned at the last meeting, including procuring products for testing.

Brian Boender and Michael Woodford discussed the status of ARI's Air Filters Certification Program. An ARI committee has met to discuss their program.

Deborah Prince of Underwriters' Laboratories said that by the end of the year they expect to have a draft protocol for testing portable air cleaning units.

Tom Bruusema of NSF International said that NSF is not focusing on the development of a health-based IAQ standard now, but rather looking to provide facilitation and education. They are publishing a newsletter and plan to host a symposium in May 1999.

Discussion

Chuck Rose presented information on filter categorization and definition. This work had been assigned to an industry committee at the previous meeting. The actual number of different varieties of filters is quite large (especially for the big companies), therefore companies should find representative sample. In defining which differences in a filter would require a new test, they looked at

- media,
- media area and
- filter configuration.

As for categorizing filters, they looked at

- filter construction,
- media type,
- intended use, and
- efficiency.

Jim discussed parallel research tests that RTI performed on loading dust. Filters have been maintained in an ambient environment for eight weeks. Every two weeks, the ASHRAE 52.2P tests are run on the filters.

Jim also discussed the ETV pilot tests that RTI ran. The filters were procured by Coopers & Lybrand representatives as established by NAFA. They sent a box of filters from each of three manufacturers. RTI and EPA had decided that for these pilot tests, the dust will be ASHRAE 52.1 dust without carbon, since all the RTI research which led to the efficiency testing protocol was done without carbon. Verification statements and reports of the testing were distributed. Suggestions were made for reporting the results.

There was extensive discussion about the dust. Barney Burroughs suggested that if the initial loading is introduced to provide conditioning for the filter and thus this step should be decoupled from the dust issue. If a better conditioning were found, then both the ASHRAE and the ETV testing could go forth and a search for a better dust could continue in parallel. RTI will examine the conditioning further. RTI and EPA are striving for a fair test; one that neither advantages or disadvantages any technology.

During a discussion of laboratories and testing, it was decided that RTI would provide a workshop for those laboratories that would like to take part in the program. This is tentatively scheduled for May 18-19 at RTI. Only US independent test laboratories are eligible to provide testing under the program. Filter companies who would like to learn about the testing are welcome to attend the workshop, but they cannot run verification tests. It is expected that the workshop will cover test equipment, test protocol and quality management. The workshop will be advertised in the Commerce Business Daily, trade publications and to our stakeholders.

The group also discussed how the testing program would be run. After the meeting, RTI and EPA discussed plans for testing. RTI will work with industry to select four types of popular filters. These filters will be acquired in a random fashion from manufacturers following acquisition plans established by industry. RTI will select one filter from each of the four types and test. Verification statements and reports will be issued without product identification, similar to the pilot tests. This testing would show that the entire verification process worked. At a later date, the participating laboratories could test another filter type as part of the laboratory qualification. The program could then be privatized.

Meeting Attendance

Attended

Nancy Adams, U.S. EPA

Brian Boender, Trion, Inc

Bob Bradley, Precisionaire Inc.

Tom Bruursema, NSF International

Barney Burroughs, IAQ Building Wellness

Larry Cavalier, 3M

Steve Cox, Hollingsworth & Vose

Harry Elinsky, Filtech Inc.
Craig Ellis, Trion, Inc
David Ensor, Research Triangle Institute
Michael Fiedler,
Ace Hardware Corporation
Deborah Franke,
Research Triangle Institute
Paul Gensler,
Environmental Filter Corporation
Jim Hanley, Research Triangle Institute
Penelope Hansen, U.S. EPA
Nancy Hearne, NSF International
Joe Hovekamp, Airguard Industries, Inc.
Carol Jennings, Federal Trade Commission
Pauline Johnston, U.S. EPA
Indoor Environment
Tim Kensok, Honeywell
Daniel King, Tri-Dim Filter Corp.
Mark King, Tri-Dim Filter Corp.
Joseph Koman,
Federal Trade Commission,
J.L. Skiter Kowalski, Carpenter Company
Edward Lyons, Filtration Group
William Matkins, Aeolus Corporation
Leyla McCurdy,
American Lung Association
Todd McKinney, Farr Company
Dale Montgomery, Flanders
Lawrence Ost, Filtration Group
Mary Ost, Filtration Group
Roger Pasch,
Research Products Corporation
Deborah Prince,
Underwriters Laboratories
John Riley, Trion, Inc.
Chuck Rose, AAF- International

John Sabelli, Intertek Testing Services

Les Sparks, U.S. EPA

Jeff Spicer, Tri-Dim Filter Corp.

Mike Stemmer, Air Kontrol, Inc.

Don Thornburg, Farr

Alan Veeck, Tidewater Air Filter, Inc.

Don Wall, Hobbs Industries

Davidge Warfield, Tri-Dim Filters

Steve Williams, ICF Kaiser

Bob Wilson, Precisionaire, Inc.

Michael Woodford, ARI

James Wooldridge,
Koch Filter Corporation

Did Not Attend

Bob Axelrad, U.S. EPA

David Brooks,
Purolator Products Company

Jim Cox, ASHRAE

Angie Gorn, National Air
Filtration Association

Dave Goss,
Wisconsin Filtration Supply, Inc.

Jim Hagewood, Koch Filter Corporation

Michael Haufe, Columbus Industries

Gary Heilmann, Airguard Industries

Scott Hines, ICF Kaiser

Jeff Holt, Precisionaire Inc.

K.C. Hsieh, Particle Tech, Inc.

Dainne Janczewski, CADM

Michael Jawer, BOMA

Peggy Jenkins, California Air
Resources Board

John Jiambalvo, AHAM

Jim Kubokawa, 3M

Earl Mielke, Complete Air Filter Co

Malcolm Mock, Quality Filters, Inc.

Elena Paoli, Federal Trade Commission

Wayne Redfern, Union Wadding Company

Steve Sanders, Air Conditioning and Refrigeration Institute

Kevin Scruggs, William T. Burnett & Co.

Chris Steele, SC Johnson Professional

Ken Sufka, National Air
Filtration Association

Gene Tatsch, Research Triangle Institute

Laurie Todd, Carolina Filters

Al Vatine, LMS Technologies, Inc.

William Weiller, Purifil

Arthur Wheeler, Wheeler Engineering

C.W. (Andy) Wood, Precisionaire Inc.